ENCODING TECHNIQUES FOR PATTERNED MAGNETIC MEDIA

Abstract of the Disclosure

The invention is directed to patterned magnetic media for use in magnetic recording and data storage, and various encoding techniques that can be used to magnetically encode data on the patterned media. For example, a patterned magnetic recording medium can include a first set of surface variations and a second set of surface variations. The medium can be conditioned to magnetically expose the surface variations relative to areas between the respective surface variations. Detection of the surface variations in the first set can allow for synchronization of a magnetic drive to the medium. Following such synchronization, the magnetic drive can selectively apply magnetic fields to a second set of surface variations of the patterned magnetic medium to encode data on the patterned magnetic medium.